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SONAR TEST AND TEST INSTRUMENTATION SUPPORT, (U)
OCT 80 D D BAKER, B O MOSES, J L SHOREY

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I. INTRODUCTION

Applied Research Laboratories, The University of Texas at Austin (ARL:UT), was awarded Contract N00140-76-C-6487, sponsored by New London Laboratory, Naval Underwater Systems Center (NLONLAB NUSC), effective 1 June 1976. Some of the work under this contract represents a follow-on effort to previous work sponsored by NLONLAB NUSC under Contract N00140-74-C-6316.

The work under Contract N00140-76-C-6487 was originally divided into six task areas that focused on technical support in areas of sonar technology.

- I. AN/FQM-10(V) Sonar Test Set Field Support
- II. Transducer Repair Facility Test Site Field Support
- III. AN/WQM-5 Sonar Test Set Field Support
- IV. Special Purpose Passive Sonar Systems Support
- V. Sonar Instrumentation Test and Evaluation
- VI. Study of Towed Line Array Acoustical Testing at Transducer Repair Facilities

Additional tasks were added by contract modifications, as follows.

- VII. AN/SQM-() Sonar Noise Measuring Set Development (Mod P00019)
- VIII. AN/WQM-5() Sonar Test Set Development (P00019)
- IX. Sonar Dome Maintenance Documentation Support (P00019)
- X. AN/BQQ-5 Power Supply Development (P00019) (follow-on work under Contracts N00024-77-C-6035 and similar effort under N00123-79-C-0459)
- XI. AN/BQQ-6 Test Instrumentation (P00035)
- XII. AN/WLR-12 Calibration (P00033)

This report is Quarterly Progress Report No. 16 under Contract
N00140-76-C-6487, for the period 1 March - 31 May 1980.

II. SPECIAL PURPOSE PASSIVE SONAR SYSTEMS SUPPORT

No effort was expended on this task during the report period.

III. SONAR INSTRUMENTATION AND EVALUATION

A. AN/GQM-2 Transducer Test Set

During this quarter, the following updated documentation and software for the AN/GQM-2 Transducer Test Set were forwarded to the appropriate facilities:

1. User Calibration Procedure, AN/GQM-2 Transducer Test Set, TL-EA-80-3, 22 February 1980,
2. AN/GQM-2 Operate Overlay, and
3. AN/GQM-2 Operate Tape, Version 02 (5/1/80).

B. AN/SQM-()

No work was performed on the AN/SQM-() Sonar Noise Measuring Set during this report period. However, work on this project will begin again shortly.

IV. AN/WQM-5() PROGRAM

A. Field Change Program

During this report period, ARL:UT delivered one AN/WQM-5, Ser All, to COMPACAREA COGARD. Thus far, a total of 17 modified sets have been delivered.

B. Field Support Services

During this report period, ARL:UT provided the following field support services:

1. returned a repaired plotter (HP 9872A) to MOTU 5, San Diego, CA;
2. provided NAVSHIPYD PHILA with a sensor calibration and readout monitor while its units were being repaired;
3. repaired and returned a sensor calibration and readout monitor to NAVSHIPYD PHILA;
4. provided NAVSHIPYD PHILA with a spare SCR control PCB 8A8 to repair a defective power supply;
5. provided MOTU 12, Mayport, FL, with a spare SCR control 8A8 card to repair a defective unit.

1 October 1980

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